Tuesday, 12 May 2009

Ref: K:\LaVie\04\P06\Architectural Statement\sp090507 Design Report v11.doc Last Modified: 12/05/09 12:04





Architectural Statement

In support of Environmental Assessment under Part 3A of the Environmental Planning and Assessment Act NSW

Illawarra International Health Precinct

Cnr Huntley and Avondale Rds, Huntley, NSW

Prepared by Imagescape Design Studios - April 2009

Page 2 of 2



Table of Contents

The Concept	4
Outline Description of Proposal	5
Detail Description of the Proposal and Staging	16
Stage 1 - Illawarra International Specialist and Surgicentre	16
Stage 2 – Pathology and Radiology Units	19
Stage 3 – 24-hour Medical Centre, Pharmacy and Casualty	
Stage 4 - Stand Alone Obstetric Unit with Dedicated Caesarean Section Theatre	ə 22
Stage 5A - Illawarra International Hospital	23
Stage 5B – Retail Shopping Plaza	25
Stage 5C – Laundry and Dry Cleaner	
Stage 6 - Nurses, Medical Students and Resident Medical Officers Re	
Stage 7 - Education Facility	29
Stage 8A - Illawarra International Aged and Disability Centre	
Stage 8B – Accommodation for Seniors	31
Responding to the site	32
Orientation	32
Topography	32
Response to Surrounding Building Types	33
Residential Building Types	33
Medical Buildings	33
Retail and Commercial	34
Access	35
Access to the site	35
Access within the site	36
Car Parking	38
Social Responsibility	44
Community	
Crime Prevention	
Responding to the Environment	
Water Management	
Landscaping and Flora	
Building Materials and Construction methods	
Transport	
Air Quality	
Noise	48

Page 3 of 3



Landscape Statement	
Public Domain	
Dementia Garden	51
Psychotherapy Garden	
Community Garden	
EXTERNAL FINISHES SCHEDULE	53

Page 4 of 4



The Concept

The opportunities offered by this proposal are varied and far-reaching. The design looks beyond the actual building fabric and requirements of the vast scale of the development. The concept being proposed has the responsibility of creating a permanent legacy to not only the community but also for the health profession at large. The development being proposed will:

- Provide a centre for 'well being'. Not only will the development deliver mainstream health advice, both reactive and proactive, it will also provide a centre for wellness and for lifestyle choices. Having an aim to create a centre for preventative lifestyle choices this can only assist and alleviate the burden of current health care deliverables.
- 2. Create a 'community hub'.

The current model for health care buildings is to focus on the immediate delivery of medical services – a very reactive response. This development will promote community involvement by integrating community services and facilities amongst the precinct buildings to encourage the interaction between resident and patient. It is only by engaging with the community that ownership and a sense of belonging will prevail.

3. Deliver world-class standards in the delivery of health services.

4. Be the first truly evacuable multi-storey health site. One of the state of the art innovations for this site is to design the entire precinct without a single vertical incremental change in level. Ramps will take the place of all paths of travel, internally as well as externally. Emergency exit paths of travel will also be replaced with appropriately graded paths of travel. Best of all, each of the buildings will be truly evacuable by allowing the wheeling of trolleys, gurneys, hospital beds and wheelchairs to safety in times of emergency.

Page 5 of 5



Outline Description of Proposal

The Illawarra International Health Precinct is an integrated medical facility providing:

- Specialist Suites and Day Surgery
- Pathology and Radiology
- 24 hr Medical Centre and Casualty
- Stand alone Obstetric Unit
- Tertiary Referral Hospital
- Nurse, Medical Student and Resident Medical Officer living accommodation
- Education Facility
- Aged and Disability Nursing Home
- Accommodation for seniors
- Ancillary laundry and support facilities
- Neighbourhood retail plaza

These facilities are accommodated over nine major buildings ranging in height from two storeys at the east of the site to eight storeys for the hospital at the western extremity of the site. Transport of patients between buildings is facilitated by an enclosed link way connecting the prime health delivery buildings.

Unique to a facility the scale of the Illawarra International Health Precinct is the complete absence of stairs. All pedestrian level changes are provided by ramps completed by lifts. This allows full wheelchair movement but also means critical and frail patients can be evacuated from all buildings without being removed from their beds.

The entire proposal has a gross floor area in the order of 297,900m sq. This calculation includes all basement car parks, storage areas and maintenance areas. Of this calculation 202,900 m sq is dedicated to tenanted and health service delivery facilities.

A total of 2,042 vehicle parking spaces have been provided on site. This is a total of basement and surface parking. Parking spaces have been provided for cars, minibuses and bicycles. A network of cycle ways and public transport complements these. Page 6 of 6



Building No	Building Name	Proposed floor Levels
1	Illawarra International Specialist & Surgicentre	
	Basement Car park Level 1	R.L. 32.0
	Loading Dock	R.L. 31.0
	Basement Car park Level 2	R.L. 35.0
	Surface Carpark	R.L. 38.5
	Level 1	
	Retail (Café, florist, chemist)	R.L. 39.0
	Health Consulting Rooms	R.L. 39.0
	Level 2	
	Hospital	R.L. 43.0
	Health Consulting Rooms	R.L. 43.0
	Day Surgery	R.L. 43.0
	Ceiling Level	R.L. 46.0
	Highest level of roof	R.L. 50.0
2	24hr Radiology (Gr. Floor) and 24hr Pathology (1st Floor)	
2		R.L. 32.0
2	(1st Floor)	R.L. 32.0 R.L. 31.0
2	(1st Floor) Basement Car park Level 1	
2	(1st Floor) Basement Car park Level 1 Loading Dock	R.L. 31.0
2	(1st Floor) Basement Car park Level 1 Loading Dock Basement Car park Level 2	R.L. 31.0 R.L. 34.5
2	(1st Floor) Basement Car park Level 1 Loading Dock Basement Car park Level 2 Surface Car park	R.L. 31.0 R.L. 34.5 R.L. 38.5
2	(1st Floor) Basement Car park Level 1 Loading Dock Basement Car park Level 2 Surface Car park Level 1 - Radiology	R.L. 31.0 R.L. 34.5 R.L. 38.5 R.L. 39.0
2	(1st Floor) Basement Car park Level 1 Loading Dock Basement Car park Level 2 Surface Car park Level 1 - Radiology Level 2 - Pathology	R.L. 31.0 R.L. 34.5 R.L. 38.5 R.L. 39.0 R.L. 43.0
2	(1st Floor) Basement Car park Level 1 Loading Dock Basement Car park Level 2 Surface Car park Level 1 - Radiology Level 2 - Pathology Ceiling Level	R.L. 31.0 R.L. 34.5 R.L. 38.5 R.L. 39.0 R.L. 43.0 R.L. 46.0
	(1st Floor) Basement Car park Level 1 Loading Dock Basement Car park Level 2 Surface Car park Level 1 - Radiology Level 2 - Pathology Ceiling Level Highest level of roof Illawarra International Hospital Casualty/ 24hrs Medical Centre and Dedicated Trauma	R.L. 31.0 R.L. 34.5 R.L. 38.5 R.L. 39.0 R.L. 43.0 R.L. 46.0
	(1st Floor) Basement Car park Level 1 Loading Dock Basement Car park Level 2 Surface Car park Level 1 - Radiology Level 2 - Pathology Ceiling Level Highest level of roof Illawarra International Hospital Casualty/ 24hrs Medical Centre and Dedicated Trauma Theatres	R.L. 31.0 R.L. 34.5 R.L. 38.5 R.L. 39.0 R.L. 43.0 R.L. 46.0 R.L. 50.0

Table 1 Summary of Building Uses, Levels and He	ights
---	-------

Page 7 of 7



Building No	Building Name	Proposed floor Levels
	Surface Car park	R.L. 38.5
	Level 1	
	Retail	R.L. 39.0
	24 hr Medical Centre	R.L. 39.0
	Hospital casualty and trauma theatre	R.L. 39.0
	Ambulance Entry	R.L. 39.0
	Level 2	
	Health Consulting Rooms	R.L. 43.0
	Community Rooms	R.L. 43.0
	School of General Practice, Training Rooms	R.L. 43.0
	Ceiling Level	R.L. 46.0
	Highest level of roof	R.L. 50.0
4	Illawarra International Hospital Obstetric Unit (Stand Alone) and Dedicated Caesarean Section Theatre	
	Basement Car park Level 1	R.L. 32.0
	Loading Dock	R.L. 31.0
	Basement Car park Level 2	R.L. 34.5
	Surface Car park	
	Level 1	
	Retail (Florist, Pharmacy, Newsagent)	R.L. 39.0
	Health Consulting Rooms	R.L. 39.0
	Hospital Obstetric Unit birthing suites	R.L. 39.0
	Level 2	
	Hospital Obstetric Unit 20 overnight beds	R.L. 43.0
	Caesarean Section Theatre	R.L. 43.0
	Ceiling Level	R.L. 46.0
	Highest level of roof	R.L. 50.0
5A	Illawarra International Hospital	
	Basement Car park Level 1	R.L. 34.0
	Basement Car park Level 2	R.L. 38.0
	Level 1	
	Hospital entry off Huntley / Admissions	R.L. 35.0
	Level 2	
	Staff facilities	R.L. 39.0

Page 8 of 8



Building No	Building Name	Proposed floor Levels
	Health Consulting Rooms	R.L. 39.0
	Level 3	
	Operating Theatres	R.L. 43.0
	Recovery	R.L. 43.0
	Psychiatric ward and roof garden	R.L. 43.0
	Level 4	
	Wards	R.L. 47.0
	Level 5	
	Wards	R.L. 51.0
	Level 6	
	Wards	R.L. 55.0
	Level 7	
	Wards	R.L. 59.0
	Level 8	
	Wards	R.L. 63.0
	Level 9	
	Plant room and Helipad	R.L. 67.0
	Ceiling Level	R.L. 70.0
	Highest level of roof	R.L. 73.0
5B	Retail Shopping Plaza	
	Basement Car park Level 1	R.L. 25.0
	Level 1	
	Retail tenancies	R.L. 28.0
	Level 2	
	Retail Tenancies	R.L. 32.0
	Commercial Tenancies	R.L. 32.0
	Supermarket	R.L. 32.0
	Loading Dock	R.L. 31.0
	Level 3	
	Restaurant and roof garden	R.L. 36.0
5C	Laundry and Dry Cleaners	
	Basement Car park Level 1	R.L. 38.0
	Level 1	
	Laundry	R.L. 41.0
	Loading Dock / Maintenance workshop	R.L. 41.0

Page 9 of 9

	1
	-

Building No	Building Name	Proposed floor Levels
	Level 2	
	Dry cleaners	R.L. 45.0
	Storage	R.L. 45.0
	Ceiling Level	R.L. 48.0
	Highest level of roof	R.L. 52.0
6	Nurses, Medical Students, Resident Medical Officers & Registrar Accommodation	
	Basement Car park Level 1	R.L. 42.0
	25 x 1 & 2 bedroom units	R.L. 45.0
	25 x 1 & 2 bedroom units	R.L. 48.0
	Ceiling Level	R.L. 50.7
	Highest level of roof	R.L. 54.0
7	Huntley Further Education Facility	
	Basement Car park Level 1	R.L. 46.0
	Level 1 – Educational and meeting	R.L. 49.0
	Level 2 – Educational and meeting	R.L. 53.0
	Accommodation Tower	
	Level 2 - Residential serviced apartments	R.L. 53.0
	Level 3 - Residential serviced apartments	R.L. 56.0
	Level 4 - Residential serviced apartments	R.L. 59.0
	Level 5 - Residential serviced apartments	R.L. 62.0
	Level 6 – Residential serviced apartments	R.L. 65.0
	Roof	R.L. 68.5
8a	Illawarra International Aged and Disability Centre	
	Level 1	
	Hydrotherapy, Physiotherapy, Kitchen and Administration	R.L. 44.0
	Level 2	
	Reception	R.L. 49.0
	Resident level	R.L. 49.0
	Level 3	
	Resident level	R.L. 52.5

Page 10 of 10

		1
		I
	╧╋	
ļ		4

Building No	Building Name	Proposed floor Levels
	Level 4	
	Resident level	R.L. 56.0
	Ceiling Level	R.L. 58.7
	Highest level of roof	R.L. 62.5
8b	Huntley Secured Seniors Accommodation	
	44 x 2 bed units	Varies with natural ground level

Page 11 of 11



			Floor	Gross Floor area as defined	Area available for	Floor Space
Item	Building Type	Site Area	Areas	by DCP	Occupation	Ratio
1	Illawarra International Specialist & Surgicentre					
	Basement Car park Level 1		2,100			
	Basement Car park Level 2		2,100			
	Surface Car park					
	Level 1 Retail (Café, florist, chemist)		500	500	350	
	Health Consulting Rooms		5,500	5,500	3,850	
	Level 2					
	Hospital		1,500	1,500	1,050	
	Health Consulting Rooms		2,000	2,000	1,400	
	Day Surgery		2,500	2,500	1,750	
	Void					
	TOTALS	12,000	16,200	12,000	8,400	1.00
2	24hr Radiology (Gr. Floor) and 24hr Pathology (1st Floor)					
	Basement Car park Level 1		1,200			
	Basement Car park Level 2		1,200			
	Surface Car park					
	Level 1 - Radiology					
			2,000	2,000	1,750	
	Level 2 - Pathology					
			2,000	2,000	1,750	
	TOTALS	3,550	6,400	4,000	3,500	1.13
3	Illawarra International Hospital Casualty/ 24hrs Medical Centre and Dedicated Trauma Theatres					
-			1,400			
	Basement Car park Level 1		1,400			

Table 2: Summary of Floor Areas

Page 12 of 12



Item	Building Type	Site Area	Floor Areas	Gross Floor area as defined by DCP	Area available for Occupation	Floor Space Ratio
	Surface Car park					
	Level 1					
	Retail (Pharmacy, Newsagent, Hairdresser, Café)		500	500	350	
	Health Consulting Rooms		3,000	3,000	2,100	
	Hospital		1,000	1,000	700	
	Level 2					
	Health Consulting Rooms		1,000	1,000	700	
	Commercial (School of General Practice, Training Rooms)		3,500	3,500	2,800	
	Void					
	TOTALS	9,700	11,800	9,000	6,650	0.93
4	Illawarra International Hospital Obstetric Unit (Stand Alone) and Dedicated Caesarean Section Theatre					
	Basement Car park Level 1		700			
	Basement Carpark Level 2		700			
	Surface Car park					
	Level 1					
	Retail (Florist, Pharmacy, Newsagent)		350	350	200	
	Health Consulting Rooms		1,150	1,150	525	
	Level 2					
	Hospital		1,500	1,500	1,120	
	TOTALS	3,600	4,400	3,000	1,845	0.83
5A	Illawarra International Hospital 303 Tertiary Referral					
	Level 0					
	Hospital Services areas and Nuclear Medicine		3,000	3,000	3,000	
	CP1 - Carpark		8,930	0		
	Level 1					
	Hospital entry off Huntley / Admissions and		1,830	1,830	10,500	

Page 13 of 13



ltem	Building Type	Site Area	Floor Areas	Gross Floor area as defined by DCP	Area available for Occupation	Floor Space Ratio
	administration	ono mou	7110000	Sy Doi	occupation	nano
	CP2 - Carpark		8,000	0		
	Level 2		0,000			
	Staff facilities		2,000	2,000	2,000	
	Health Consulting Rooms		6,000	6,000	4,900	
	CP3 - Carpark		10,750	0	,	
	Level 3		-,			
	Operating Theatres		3,550	3,550	3,550	
	Recovery		1,000	1,000	7,000	
	Psychiatric ward		1,000	1,000	1,000	
	Level 4		,	,	,	
	Wards		4,660	4,660	4,660	
	Level 5		,	,	,	
	Wards		4,660	4,660	4,660	
	Level 6			, , , , , , , , , , , , , , , , , , ,	· · ·	
	Wards		4,660	4,660	4,660	
	Level 7			, , , , , , , , , , , , , , , , , , ,	· · ·	
	Wards		4,660	4,660	4,660	
	Level 8			, , , , , , , , , , , , , , , , , , ,	· · ·	
	Wards					
	Level 9					
	Plant room and Helipad		100	100	100	
	TOTALS	29,500	69360	41680	37580	1.41
5B	Retail Shopping Plaza					
	Basement Carpark		3,150			
	Level 1					
	General retail tenancies		5,730	5,730	1,400	
	Level 2					
	Community Facilities		1,000	1,000	490	
	Supermarket and Loading dock		4,730	4,730	2,800	
	Level 3					
	Restaurant and roof garden		1,230	1,230	700	
	TOTALS		15,840	12,690	5,390	

Page 14 of 14



	1		1	1 -	1	1
				Gross Floor area		
				as	Area	Floor
•			Floor	defined	available for	Space
ltem	Building Type Commercial Laundry, Dry	Site Area	Areas	by DCP	Occupation	Ratio
	Cleaners and Car Washing					
5C	Facility					
	Basement Carpark		1,200			
	Level 1					
	Laundry		1,000	1,000	1,050	
	Maintenance workshop		200	200	200	
	Level 2					
	Dry cleaners		200	200	200	
	Storage		1,000	1,000	1000	
	TOTALS	1,500	3,600	2,400	2,450	1.6
	Nurses, Medical Students, Resident Medical Officers					
	& Registrar					
6	Accommodation					
	Basement Carparking		700	0		
	Surface Carpark					
	25 x 1 & 2 bedroom units		2,000	2,000	1,400	
	25 x 1 & 2 bedroom units		2,000	2,000	1,400	
	Visitor parking					
	TOTALS	5,500	4,700	4,000	2,800	0.73
7	Huntley Further Education Facility					
	Basement car park Level 1		3,590			
	Surface Car park		,			
	Level 1					
	Training rooms		3,590	3,590	2,513	
	Level 2					
	Training Rooms		3,590	3,590	2,513	
	Accommodation			1		
	Level 2 - 20 x 1 bed units		1,340	1,340	938	
	Level 3 - 20 x 1 bed units		1,340	1,340	938	
	Level 4 - 20 x 1 bed units		1,340	1,340	938	
	Level 5 - 20 x 1 bed units		1,340	1,340	938	
	TOTALS	8,700	16,130	12,540	8,778	1.44

Page 15 of 15



ltem	Building Type	Site Area	Floor Areas	Gross Floor area as defined by DCP	Area available for Occupation	Floor Space Ratio
8a	Illawarra International Aged and Disability Centre					
	Surface Car park					
	Basement Level 1 -					
	Therapy		600	600	420	
	Level 2					
	Retail		150	150	105	
	Resident level		1,600	1,600	1600	
	Level 3					
	Resident level		1,600	1,600	1600	
	Level 4					
	Resident level		800	800	800	
	TOTALS	30,800	4,750	4,750	4,525	0.25 *
8b	Huntley Secured Seniors Accommodation					
	44 x 2 bed units		2,940	2,940	2,940	
	Visitor parking					
	TOTALS		2,940	2,940	2,940	
	TOTAL FOR ILLAWARRA INTERNATIONAL HEALTH PRECINCT		156,060	108,940	94,868	1.04

* Includes 8b Huntley Secured Seniors Accommodation

Page 16 of 16



Detail Description of the Proposal and Staging

The Illawarra International Health Precinct will be constructed in stages as follows:

Stage 1 - Illawarra International Specialist and Surgicentre

This facility will provide a variety of services and opportunities to the general public. Having an aim to attract world-class professionals to support the Health Precinct, this building will provide a variety of suites and support services.

Licensed Procedures

1) Surgical

- o General Surgery
- Gynaecological Surgery
- ENT Surgery
- Ophthalmic Surgery
- Orthopaedic Surgery
- o Neurosurgery
- Plastic and Microsurgery
- 2) Endoscopic
- 3) Dialysis
- 4) Cytotoxic
- 5) Cardiac Catherisation
- 6) Family Care
- 7) Paediatric Surgery

Anaesthesia

- o General
- o Spinal/Epidural
- o IV Sedation/Nerve Block

Facilities provided

Specialist Consultation Suites

• Catering for 92 Specialists

Page 17 of 17



Day Surgery

- 6 x Operating Theatres
- 5 x High Dependency Recovery Beds
- 4 x ICU Beds
- 21 x Recovery Beds
- 2 x Recovery Cots
- 40 x 'Stage 2' Recovery Chairs
- 10 x Overnight Beds with ensuite bathroom

Specialist Consultation Suites

• 92 Specialist medical professionals in a range of suite sizes and configurations

Training Rooms

 6 Briefing Rooms available for a variety of uses from community learning sessions such as St John Ambulance certification through to delivery of lectures from specialist professions.

Retail

- Pharmacy
- Florist / gifts
- Coffee/Sandwich Shop
- Pathology Collection Centre

Sub-grade Car Park

- Two levels of basement carparking accessed directly from Avondale Road. Surface Car Park
- Truck delivery dock with turning area shared with building 4
- Services including emergency generator

Surface carpark

- Visitor Car Spaces all sized to meet disabled access requirements
- Outdoor dining for cafe

Building Materials

The building will be constructed using precast concrete elements for floors and walls. Roof is constructed using a structural steel frame with metal cladding. External wall finishes are a combination Page 18 of 18



of honed sandstone facing and copper cladding. A detailed finishes schedule is appended.

ESD Initiatives

The Surgicentre has been designed to achieve a five star rating under the Green Building Council of Australia Healthcare Pilot rating tool.

Measures employed to achieve this include:

- The building is orientated to maximise solar gain during winter with solar gain during summer being controlled via generous roof overhangs to the north. The south façade of the building is set into the hillside to minimise heat loss.
- The medical suites will be individually air-conditioned allowing occupants to control the level of heating and cooling. This individual control means operation of air conditioning can be restricted to those areas requiring it thereby reducing energy consumption and green house gas production. All health suites have operable windows allowing air conditioning to be turned off on temperate days.
- All public areas are naturally ventilated via the courtyard and operable skylights to the upper floor corridors.
- Car park has been kept open to allow cross flow ventilation and thereby reducing energy consumption by mechanical ventilation.
- Upper level corridors receive natural light from the continuous skylights with glare controlled by roof overhangs.
- Materials have been selected for low emission of volatile chemicals.
- Rigid polyurethane foam insulation will be applied to external construction elements where needed to reduce thermal transmission. This product contains fire retardants, contains no CFC's or HCFC's and has no ozone depleting potential.
- Recycled materials have been utilised where feasible and practicable.
- Harvested stormwater will be utilised for landscape irrigation.

Page 19 of 19



Stage 2 – Pathology and Radiology Units

Sonic Health Care 24 hr Radiology Units (Ground Floor)

24 Hr Pathology (First Floor) – Sonic Healthcare Limited

This facility will provide on site collection and analysis of radiology and pathology specimens. This building will be the central collection facility and laboratory for the service in the south coast region.

Facilities provided

Sub-grade Car Park

- Two levels of basement carparking accessed directly from Avondale Road.
- Dedicated parking for courier vehicles

Surface Car Park

• Visitor Car Spaces all sized to meet disabled access requirements

Radiology

- Simple Radiology,
- Ultra Sound,
- CT Scan
- MRI

Pathology

 NATA Accredited Category '1' Laboratory to be operated by Sonic Health Care Ltd Trading as Douglas Hanley Moir Pathology

Building Materials

The building will be constructed using precast concrete elements for floors and walls. Roof is constructed using a structural steel frame with metal cladding. External wall finishes are a combination of honed sandstone facing and copper cladding. This is the same and complementary to the finishes to building 1.

ESD Initiatives

The building will be designed to achieve a five star rating under the Green Building Council of Australia Healthcare Pilot rating tool.

Rigid polyurethane foam insulation will be applied to external construction elements where needed to reduce thermal

Page 20 of 20



transmission. This product contains fire retardants, contains no CFC's or HCFC's and has no ozone depleting potential.

Stage 3 – 24-hour Medical Centre, Pharmacy and Casualty

This facility will provide the opportunity for round the clock health assistance and the medical centre is planned to be a bulk billing service.

The facilities within this building will also be dedicated to casualty and trauma care. No longer will the community have their loved ones evacuated to far away regions in times of disaster. This building plans on having a trauma station equipped to handle the worst of the regions emergencies.

The 'emergency department' for the hospital is therefore located in this building. This also allows the safe entry and exit of ambulances to the trauma centre – completely separated from pedestrian and community vehicular access.

This building will be linked to the main hospital for additional support to the delivery of health services and opportunities.

Anaesthesia

- General
- Spinal/Epidural
- IV Sedation/Nerve Block

Facilities provided

Sub-grade Car Park

- Two levels of basement carparking accessed directly from Avondale Road.
- 240 car spaces available
- Both loading and unloading will also be carried out in these basement levels

Surface Car Park

• Visitor Car Spaces all sized to meet disabled access requirements

Casualty

- 1 Trauma Dedicated Theatre
- 3 Minor Operative Theatres

Illawarra International Health Precinct, Huntley Architectural Statement

Page 21 of 21



• 30 Treatment Bays

Medical Centre

- 24 Hour Medical Centre
- School of General Practice
- Dental Practitioner
- Allied Health Professionals
- Administration and Staff Education
- Training Rooms

Retail

- 24hr Pharmacy
- Florist
- Newsagent
- Hairdresser
- Café/Food Court

Community Meeting Rooms

• A variety of sized rooms will be located on the upper floor opposite the therapy pool in building 8. This will be available for use by the community at large.

Chapel

• A multi denominational space available to individuals and/or small groups in their time of need

Building Materials

The building will be constructed using precast concrete elements for floors and walls. Roof is constructed using a structural steel frame with metal cladding. External wall finishes are a combination of honed sandstone facing and copper cladding. This is the same and complementary to the finishes to building 1 & 2.

ESD Initiatives

The building will be designed to achieve a five star rating under the Green Building Council of Australia Healthcare Pilot rating tool.

Rigid polyurethane foam insulation will be applied to external construction elements where needed to reduce thermal transmission. This product contains fire retardants, contains no CFC's or HCFC's and has no ozone depleting potential.

Page 22 of 22



Stage 4 - Stand Alone Obstetric Unit with Dedicated Caesarean Section Theatre

This facility will provide a much-needed obstetrics facility to the region. Not only will the design of this building be focused on birthing but also towards neonatal and post birth support to families. Parents will also be comforted to know that in the event of an unexpected emergency, both mother and child will be treated in the same location with dedicated Caesarean theatre.

Anaesthesia

- General
- Spinal/Epidural
- IV Sedation/Nerve Block, Epidural, Pudendal
- Local

Facilities provided

Sub-grade Car Park

- Two levels of basement car parking accessed directly from Avondale Road.
- Direct access will be available to ground floor via both levels. Access is available by covered ramped pathways as well as via lift access
- Both loading and unloading will also be carried out in these basement levels

Surface Car Park

• Visitor Car Spaces all sized to meet disabled access requirements

This external car park will lead directly to the health suite floor of the building

Obstetric Unit

- 6 x Delivery Suites
- 1 x Birthing Centre
- Dedicated Caesarean Section Theatre
- Private Suites for on-site Obstetricians, Paediatricians and Intensivists
- 20 x 1 Bedroom Patient Accommodation with En-suite
- Well Baby Nursery

Page 23 of 23



- Stage 2 Critical Care Nursery
- 2 x Training Rooms

Building Materials

The building will be constructed using precast concrete elements for floors and walls. Roof is constructed using a structural steel frame with metal cladding. External wall finishes are a combination of honed sandstone facing and copper cladding. This is the same as and complementary to the finishes to building 1, 2 & 3.

ESD Initiatives

The building will be designed to achieve a five star rating under the Green Building Council of Australia Healthcare Pilot rating tool.

Rigid polyurethane foam insulation will be applied to external construction elements where needed to reduce thermal transmission. This product contains fire retardants, contains no CFC's or HCFC's and has no ozone depleting potential.

Stage 5A - Illawarra International Hospital

303 Beds in Hospital Proper supported by:

- 19 Beds in Surgicentre
- 10 Beds in Casualty
- 20 Beds in Obstetrics

Total overnight capacity for the Hospital is 352 beds with the total overnight capacity of the Health Precinct being 632 beds inclusive of the nursing home.

Licensed Procedures:

- All previously Delivered Procedures in Stages 1,3,4
- Internal Medicine
- Surgical
- Psychiatric
- Rehabilitation
- Intensive Care
- Neonatal Intensive Care and Special Care
- Open Heart

Page 24 of 24



Anaesthesia:

- General
- Spinal/Epidural
- IV Sedation/Nerve Block

Facilities provided

Sub-grade Car Park

- Three levels of car parking accessed directly from the surface carpark under the transmission tower.
- Both loading and loading will also be carried out from these levels

Surface Car Park

• Visitor Car Spaces all sized to meet disabled access requirements

Hospital Podium Levels 1 to 3

- 10 Operating Theatres
- Radiotherapy Unit
- Staff facilities
- Hospital administration
- Hospital entry with short stay set down parking
- Oncology Unit
- Nuclear Medicine
- 8 Training Rooms
- Mortuary
- Kitchen
- 1000 undercover car spaces
- Loading Dock
- Auxiliary power and services
- Health consulting rooms

Retail Podium Level 2

- Pharmacy
- Florist
- Newsagent

Page 25 of 25



Hospital Tower Levels 4 to 9

- 303 Single rooms
- Patient lounge
- Staff training rooms
- Hospital Roof
 - Helipad
 - Plant and Equipment

ESD Initiatives

The building will be designed to achieve a five star rating under the Green Building Council of Australia Healthcare Pilot rating tool.

Rigid polyurethane foam insulation will be applied to external construction elements where needed to reduce thermal transmission. This product contains fire retardants, contains no CFC's or HCFC's and has no ozone depleting potential.

Stage 5B – Retail Shopping Plaza

Fronting Avondale Rd this new two-storey neighbourhood shopping centre for the Penrose and Huntley communities provides a full range of retail and commercial uses. It is envisaged tenancies will include:

- Supermarket
- Banks and credit unions
- Private Health Insurance
- Fruit and vegetable
- Butcher
- Health foods
- Real-Estate
- Restaurant
- Hairdresser
- Beauty Salon
- Café/Food Court
- Gymnasium
- Some commercial offices
- Laundromat/Dry Cleaner

Page 26 of 26



• Childcare centre

Service access is adjacent to the hospital loading dock with a combined delivery vehicle entrance

Facilities Provided

- Surface car park
- Basement carpark
- Two levels of retail and commercial space linked by accessible ramp and lift
- Roof top restaurant with extensive outdoor gardens and passive recreation space. This restaurant is adjacent to the staff areas within the hospital.

Building Materials

This construction of this building is integral with the hospital podium but designed in such a way that it can be separated from the hospital, operated as a separate commercial entity and strata titled if required.

The building will be constructed using precast concrete elements for floors and walls. Roof is accessible concrete slab and forms a roof top garden and outdoor dining for he restaurant. External wall finishes are principally polished concrete with glazed shopfronts. This is to provide a consistent streetscape to that created by buildings 1 to 4 along Avondale Rd.

Stage 5C – Laundry and Dry Cleaner

This building consists of a two-storey commercial laundry supported by a three-storey administration facility. It will provide the laundering services to all the Health Precinct buildings as well as providing a dry-cleaning service for staff and surrounding community. This stage will also allow for the majority of the maintenance support for the site including generators, water recycling and care taking.

The building is orientated to the north. The higher 3-storey portion of the building is located at the furthest point away from residents, parallel to the transmission tower surface carpark. This building will also be screened from residents by extensive planting surrounding the adjacent stormwater detention basin.

A car park level utilises the fall of the land to provide parking under the building. Page 27 of 27



Facilities Provided

Sub-grade Car Park

- One level of basement carparking accessed directly from the surface carpark under the transmission tower.
- Both loading and loading will also be carried out in this basement level

Surface Car Park

• Visitor Car Spaces all sized to meet disabled access requirements

Level 1 – Laundry

- 2 x Continuous Batch Washers
- Barrier Area
- 2 Dirty Storage Areas
- 6 x High Duty Dryers
- 3 x High Duty Ironers
- Ozone System
- Onsite Water Recycling
- Plant Room
- Workshop and Maintenance
- Power Generation
- Drive Thru Pickup

Level 2 – Laundry

- Administration
- Amenity Areas
- Toilets
- Clean Storage
- Stock Storage
- Dry Cleaning Area
- Garment Marking

Building Materials

The building will be constructed using precast concrete elements for floors and walls. Roof is constructed using a structural steel Page 28 of 28



frame with metal cladding. External wall finishes are principally honed sandstone cladding while the lower building elements are largely glazed and open to the adjacent landscaped areas.

ESD Initiatives

The building will be utilising harvested rainwater for water filtration. Much of the water being utilised in the facility will be recycled and reused wherever possible. Water recycling will also be utilised for steam generation required in the processing.

Rigid polyurethane foam insulation will be applied to external construction elements where needed to reduce thermal transmission. This product contains fire retardants, contains no CFC's or HCFC's and has no ozone depleting potential.

Stage 6 - Nurses, Medical Students and Resident Medical Officers Registrar Accommodation

This building provides staff living accommodation over two floors with parking under.

Facilities Provided

Sub-grade Car Park

- One level of basement carparking accessed directly from the surface carpark under the transmission tower.
- Both loading and loading will also be carried out in this basement level

Surface Car Park

• Visitor Car Spaces all sized to meet disabled access requirements

Residential accommodation

- 30 x 1 Bedroom Apartments
- 20 x 2 Bedroom Apartments
- 4 x Meeting Room
- 1 x Training Room

Note: This building is integral with Tertiary Referral Hospital Status and associated Education Programs. Will be affiliated with TAFE Wollongong, and University.

Page 29 of 29



Building Materials

The building will be constructed using precast concrete elements for floors and walls. Roof is constructed using a structural steel frame with metal cladding. External wall finishes are principally copper cladding with lower elements in honed sandstone cladding.

This achieves complementary finishes to building 1 with a more residential theme and will met Basix requirements.

Stage 7 - Education Facility

This building consists of a two-storey podium housing a range of flexible lecture and meeting rooms with an adjacent six level tower providing short stay residential accommodation in serviced onebedroom apartments.

The building is orientated to the north with the education spaces opening onto extensive terrace and landscaped areas.

A car park level utilises the fall of the land to provide parking under the building.

Facilities Provided

Sub-grade Car Park

- One level of basement carparking accessed directly from the surface carpark under the transmission tower.
- Both loading and loading will also be carried out in this basement level

Surface Car Park

Visitor Car Spaces all sized to meet disabled access requirements

Education Centre Levels 1 and 2

- Range of small flexible training rooms for groups of 8 to 20 people
- Flexible meeting and lecture rooms for up to 150 people
- Tiered lecture room with audiovisual equipment for 150 people
- Dining room
- Kitchen
- Administration

Page 30 of 30



Accommodation Levels 2 to 6

- 80 x 1 Bedroom Serviced Apartments provided for Patient Carer/Relative Accommodation for visiting International and Interstate patients receiving Extended Therapies
- Outpatients accommodation while undergoing extended therapies, including Radiotherapy and Chemotherapy

Building Materials

The building will be constructed using precast concrete elements for floors and walls. Roof is constructed using a structural steel frame with metal cladding. External wall finishes are principally honed sandstone cladding while the lower building elements are largely glazed and open to the adjacent landscaped areas.

Stage 8A - Illawarra International Aged and Disability Centre

Four-storey glass central services building housing dining rooms and resident's lounges with:

- 2 x Two-levels wings
- 1 x Three-level wing
- 1 x Four-level wing

The building is integrally designed to allow individual building wings to be constructed to meet a graded development demand and opening.

Facilities Provided

Surface Car Park

- 10 Car Spaces (main surface car park of 100 spaces is adjacent)
- Parking for 5 mini buses with dedicated turning circle and drop off / pick up area

Rehabilitation Centre Level 1

- Gymnasium, Pool, Spa and Hydrotherapy
- Accessible to Day Care Providers
- Accessible to Rehabilitation Providers
- Training Exercise Physiologists
- Nutrition Education
- Caring for Aged Education

Page 31 of 31



• Craft and "Men's Shed"

Nursing Home Levels 2 to 4

- Accommodation for 280 persons in mainly single bed rooms
- Provision of twin rooms for couples
- Aged guardian with Handicapped Dependent
- Dedicated Ethnic/Cultural Wings
- Dedicated wing for youth in need of long term nursing care
- Dedicated wing for patients with dementia
- Ethnic/Cultural Kitchen appropriate to the needs of a range of residents
- Dementia Walk
- Community Garden

Building Materials

The building will be constructed using precast concrete elements for floors and walls. Roof is constructed using a structural steel frame with metal cladding. External wall finishes are principally copper cladding with lower elements in honed sandstone cladding.

This achieves complementary finishes to building 1 with a more residential theme.

Stage 8B – Accommodation for Seniors

This stage provides 44 residential two-bedroom units, with each building containing four units and four garages. Designed in compliance with SEPP 2000 Accommodation for Seniors Living this stage will be operated in conjunction with the Illawarra International Aged and Disability Centre constructed in stage 8A

Building Materials

The building will be constructed using precast concrete elements for floors and walls. Roof is constructed using a timber frame with metal cladding. External wall finishes are principally face brick cladding and will met Basix requirements.

Facilities Provided

44 x 2 bedroom Independent Living Houses with Emergency call to the Nursing Home

Page 32 of 32



Responding to the site

Orientation

The site of the Illawarra International Health Precinct borders a residential area to the east and rural lands to the west. The site has street access to all frontages with Huntley Rd to the south, Avondale Rd to the north and Gooloogong St to the east. Gooloogong St is kerb and guttered. Huntley Rd is denoted as the main access road to the new residential subdivisions to the west. Extensive escarpment views are enjoyed from most areas of the site.

The buildings are orientated to the north to maximise passive solar capture and views to the escarpment. The natural grade is utilised to allow the southern building to look past the lower northern structures. The natural grade allows for the car parking to be easily accommodated in sub grade levels below the main buildings.

Topography

The natural gradient of the site has strongly influenced the design of the development. Building heights have been determined by the ground levels, and terracing has been introduced to minimise the dominance and visual impact of the building masses and their heights.

The alignment of the contours along Avondale Road provides for level access from the Obstetrics Units, Day Surgery Centre and to the hospital. This facilitates the movement of patients around the complex.

Careful planning of the terraced levels has also provided the opportunity to utilise the ramps and gradient pathways throughout the precinct, both internally and externally. These step free pedestrian pathways will offer site users a safe and truly evacuable means of escape.



Figure 1: Site section demonstrating lower heights adjacent to existing residential areas

Page 33 of 33



Response to Surrounding Building Types

The design of the project employs a layered approach to provide a transition from the low scale residential subdivision to the east to the more intensive hospital use to the west.

Residential Building Types

The transition from the existing detached dwellings is provided by the independent living units. These residential units provide continuity from the existing detached houses but with an increased density in keeping with contemporary planning principals. These units will be in accordance with the objectives of State Environmental Planning Policy (Seniors Living) 2004.



Figure 2: Distribution of building uses across site

The next layer is the

living accommodation for medical staff and students together with the Illawarra International Aged and Disability Centre. These are a higher intensity of land use with buildings of two stories at the east rising up to three storeys.

The two story buildings fronting Avondale Rd provide an introduction to the Huntley Village Plaza. Avondale Rd is a secondary access road providing ideal access for the community to these less intensive medical uses.

The 2-storey Huntley Village Plaza provides a focus to the Avondale Rd / Huntly Rd intersection with excellent access to the new residential communities planned to the west of the site. The plaza with central fountain provides the public entry to the hospital and health precinct.

Medical Buildings

The hospital which presents a more intensive use, higher density and greater building height is separated from the residential developments proposed to the surrounding sites by the lower scale Huntley Village

Page 34 of 34



Plaza, Medical Centre and Education Centre and shielded from the existing detached residential estate by the independent living units.

Retail and Commercial

The shopping plaza, located on the corner of Huntley and Avondale Rd will develop the retail component as a more independent function with separate accesses and car parking to encourage surrounding residents to integrate within the site on a daily basis and develop a community component within the site.

Page 35 of 35



Access

Access to the site

Vehicular

Primary vehicle access is from Huntley Rd, which is the designated major access road to west Dapto. For this reason the Hospital entry and the main car park entries are from Huntley Road.

Secondary access for less intense traffic needs is provided from Avondale Rd. The main medical buildings (obstetrics, day surgery, pathology, casualty) and retail precinct front Avondale Rd. This is a secondary street more compatible to pedestrian access in



Figure 3: Main access points to the site

conjunction with low vehicle speeds. Short and long-term parking is provided off Avondale Rd for shoppers, patients and visitors.

All truck delivery docks are accessed off Avondale Rd, which has a 50kph speed restriction. Truck access to the site will be along Huntley Rd and thence Avondale Rd. With this route truck movements are not past houses along Avondale Rd, nor are they via the level crossing.

Gooloogong St will only provide vehicle access for the residents of the independent living units. The independent living units emulate the houses on the opposing side of Gooloogong St and maintain the residential character of this street with individual garages fronting the street.

This hierarchy of vehicular access maintains the high level of privacy and convenience already in place for existing residents of on Gooloogong Street and the Penrose estate while utilising the existing road network. The proposed vehicular access have been designed based on the outcomes of the TMAP analysis (Cardno Eppell Olsen 2009)

Page 36 of 36



Pedestrian

A 2.5m wide public access shareway is proposed for the perimeter of the site. This shareway will provide safe access to pedestrians from the adjacent Penrose estate to the health precinct. Access around the site, to and from the site as well as to and from each individual building will be linked to this shareway.

Public Transport

One of the main opportunities brought about by a development such as this is the major benefit it provides to upgrade to infrastructure. It is envisaged that this development will attract major transport upgrades for buses, trains and taxis. It is for this reason that all main access points to the precinct are designed to have layback zones for bus stops and taxis. These laybacks will be fitted with covered and protected seating.

The other advantage envisaged with the provision of safe and comfortable public transport is the attraction it will have for community services pick-up and delivery of patients to and from around the surrounding region.

Bicycle

A 2.5m wide public access shareway is proposed for the perimeter of the site. This shareway will provide safe access to bicycle riders from the adjacent Penrose estate to the health precinct. Access around the site, to and from the site as well as to and from each individual building will be linked to this shareway.

Secure bicycle parking is provided within each building together with showers to encourage workers to commute by bicycle.

Emergency Vehicles

Separate entrances and exits will be made for ambulances and other emergency vehicles, allowing them direct access to casualty and other buildings around the site.

Access within the site

Vehicle

All carparks are linked internally eliminating the need for any vehicle to enter the public road network to traverse from one building to another.
Page 37 of 37



The carparks to buildings 1 to 4 are linked at both covered levels as well as the surface and will operate as one continuous carpark.

Roadways are designed to allow access to Waste Management Trucks. Separate garbage storage areas have been designed for each facility.

Roadways have been designed to allow delivery trucks separate access to loading docks for the unloading and transfer of goods

Pedestrian

All pedestrian pathways, particularly in relation to access arrangements, surveillance and layout, are designed to cater for the requirements of all groups of the community including the disabled, elderly and young, as well as people working in and around the site. The gradients of pathways will be 1:20 grade augmented by 1:14 ramps where necessary.

An enclosed, step free walkway links the primary medical facilities in buildings 1 –5 allowing visitors and staff direct all weather access between the buildings.

Access throughout the development from landscaped gardens to car parking and each puilding is designed free of steps with ramps providing change of level. This allows free flowing access for the disabled, aged and infirm.



Figure 4: Typical section through buildings 1 to 4 showing shareway

This step free pedestrian access offers staff, patients and visitors a safe and truly evacuable means of escape in emergency.

Bicycle

Roadways within the site are designated low speed zones with widths suitable for shared bicycle use.

Page 38 of 38



Car Parking

Car parking is distributed across the site with each building having independent car parking facilities. Parking is provided by a combination of sub grade parking under buildings and surface parking at grade. The car parking has been designed based on the outcomes of the TMAP analysis (Cardno Eppell Olsen 2009)

Parking and Access allowances exceed the current DCP to ensure there is no impact on adjacent residential areas through overflow on street parking. Allowances shall also be met for parking for the disabled, parking for motorcycles and importantly, secure racks for bicycles.

Buildings to Avondale Rd other than the retail have been designed to discourage on-street parking: Instead access for visitors is direct to either the elevated surface car park or undercover parking. This will discourage Health Precinct visitors from parking along the adjacent streets and impacting on residential areas.

Separate car parking with independent access is provided to patrons using the shopping plaza to encourage the local community use and provide separate identity to the hospital precinct.

Distribution of parking across the site is detailed in table 3.

Page 39 of 39



Building No	Building Name	Parking Reqd. as defined by DCP	Disabled spaces Required	Parking Provided
1	Illawarra International Specialist & Surgicentre			
	Basement Car park Level 1			137
	Basement Car park Level 2			119
	Surface car park			33
	Level 1			
	Retail (Café, florist, chemist)	14		
	Health Consulting Rooms	115		
	Level 2			
	Hospital	10		
	Health Consulting Rooms	43		
	Day Surgery	60		
	Void			
	TOTALS	241	5	289
2	24hr Radiology (Gr. Floor) and 24hr Pathology (1st Floor)			
	Basement Car park Level 1			45
	Basement Car park Level 2			45
	Surface Car park			10
	Level 1 - Radiology			
		30		
	Level 2 - Pathology			
		50		
		10		
	TOTALS	90	2	100
3	Illawarra International Hospital Casualty/ 24hrs Medical Centre and Dedicated Trauma Theatres			
	Basement Car park Level 1			115
	Basement Car park Level 2			115
	Surface Car park			20

Table 3: Car Parking Calculations

Page 40 of 40



Building No	Building Name	Parking Reqd. as defined by DCP	Disabled spaces Required	Parking Provided
	Level 1			
	Retail (Pharmacy, Newsagent, Hairdresser, Café)	14		
	Health Consulting Rooms	70		
	Hospital	5		
	Level 2			
	Health Consulting Rooms	23		
	Commercial (School of General Practice, Training Rooms)	70		
	Void			
	TOTALS	182	4	250
4	Illawarra International Hospital Obstetric Unit (Stand Alone) and Dedicated Caesarean Section Theatre			
	Basement Car park Level 1			25
	Basement Carpark Level 2			25
	Surface Car park			10
	Level 1			
	Retail (Florist, Pharmacy, Newsagent)	8		
	Health Consulting Rooms	16		
	Level 2			
	Hospital	10		
	TOTALS	34	1	60
5A	Illawarra International Hospital 303 Tertiary Referral			
	CP1 - Carpark level 1			309
	CP2 - Carpark Level 2			279
	Basement Car park Level 0			318
	Surface Carpark			
	Basement Level 0-Kitchen, Mortuary and Nuclear Medicine			
	Level 1			
	Hospital entry off Huntley / Admissions	20		
	Level 2			

Page 41 of 41



Building No	Building Name	Parking Reqd. as defined by DCP	Disabled spaces Required	Parking Provided
	Staff facilities	100		
	Health Consulting Rooms	150		
	Level 3			
	Operating Theatres	50		
	Recovery			
	Psychiatric ward and roof garden	13		
	Level 4			
	Wards	38		
	Level 5			
	Wards	38		
	Level 6			
	Wards	38		
	Level 7			
	Wards	38		
	Level 8			
	Wards			
	Level 9			
	Plant room and Helipad			
	TOTALS	483	10	906
		405	10	300
5B	Retail Shopping Plaza			
	Basement car park Level 1			100
	Surface Car park			40
	Level 1			
	General retail tenancies	56		
	Level 2			
	Community Facilities	20		
	Supermarket	112		
	Level 3			
	Restaurant and roof garden	28		
	TOTALS	216	4	140
	Commercial Laundry, Dry Cleaners			
5C	and Car Washing Facility			
	Basement Level 1 - Car parking and Maintenance			30
	Surface Car park			5

Page 42 of 42



Building No	Building Name	Parking Reqd. as defined by DCP	Disabled spaces Required	Parking Provided
	Level 1			
	Laundry	18		
	Maintenance workshop	2		
	Level 2			
	Dry cleaners	6		
	Storage	12		
	TOTALS	37	1	35
6	Nurses, Medical Students, Resident Medical Officers & Registrar Accommodation			
	Basement Car park			50
	Surface Carpark			10
	30 x 1 bed units	30		
	20 x 2 bed units	25		
	Visitor parking			
	TOTALS	55	1	60
7	Huntley Further Education Facility			
	Basement Car park Level 1			100
	Surface Car park			10
	Level 1			
	Training rooms	63		
	Level 2			
	Training Rooms	63		
	Accommodation			
	Level 2 - 20 x 1 bed units	20		
	Level 3 - 20 x 1 bed units	20		
	Level 4 - 20 x 1 bed units	20		
	Level 5 - 20 x 1 bed units	20		
	TOTALS	206	4	110
8a	Illawarra International Aged and Disability Centre			
	Surface Car park			110

Page 43 of 43



Building No	Building Name	Parking Reqd. as defined by DCP	Disabled spaces Required	Parking Provided
	Basement Level 1 -			
	Therapy	20		
	Level 2			
	Retail	4		
	Resident level	24		
	Level 3 Resident level Level 4			
	Resident level	23		
	ΤΟΤΑΙ	<u>-S 94</u>	2	110
8b	Huntley Secured Senio Accommodation	rs		
	44 x 2 bed units	53		44
	Visitor parking (driveway)			44
	ΤΟΤΑΙ	_S 53	1	88
	OVERALL TOTAL	_S 1,691	29	2,104



Social Responsibility

Community

The proposal will create a new community that will be satisfied by a wide range of accessible services and facilities located both on and off site.

It is anticipated the development will forge its own sense of community and positive identity. Proposals will enhance integration and connectivity with existing communities and the surrounding urban environment through the design of welcoming gateways and open spaces, as well as a network of safe footpaths and cycle routes, to create strong physical and visual links.

The advancement in infrastructure will also go a long way to satisfy the need of existing residents in the area which have been disadvantaged regarding public transport and basic service requirements for some time.

The provision of recreational opportunities such as restaurants and cafes on the site will also assist in integrating existing residents with newcomers to the site.

The attraction of the site facilities and the opportunities posed will also bring new residents from outside the region. More so, it will attract international professional skills and talent. The international wave of residents and visitors will provide a flow on effect to the general community development in the form of restaurant styles, ethnic/cultural events and the cottage industry.

Crime Prevention

The proposal will be designed to provide a safe environment with good surveillance of streets, paths and open spaces. Access paths to and from buildings as well as throughout the covered car parks have been designed to minimise safety risks. Bus shelters and taxis ranks have been designed for successful surveillance. Street security lighting will cover all main entry and exit points to buildings using the Integral Energy Night Watch programme. Careful design and layout of the development will seek to secure community safety. Page 45 of 45



Aside from the safety and security of pedestrians, visitors and residents, the safety and security of the buildings and grounds also needs consideration. Vandalism and graffiti are a major cause of distaste amongst residents and patients. It is for this reason that building materials will be selected to minimise the temptation to graffiti artists. Graffiti cleaning policies will also be implemented to all building maintenance programmes.

It is also proposed that buildings will be used at a variety of times and on different days of the week. Vandalism to buildings usually is carried out while buildings are not in use or have a very low occupancy rate. By encouraging the buildings to be used at a variety of times and days, vandalism is kept to a minimum.

The most effective stand against graffiti and vandalism is community ownership. Through the many community activities and opportunities on site it is hoped that this aim can be achieved. In particular, the many community arts programs on offer may provide opportunities for members of the public to express their artistic skills. Page 46 of 46



Responding to the Environment

Water Management

Refer to Water Management report

Landscaping and Flora

The comprehensive landscaped areas that surround the individual buildings and the buildings internal courtyards will promote greenhouse gas reduction while providing an interactive space of site uses.

Indigenous species of plants such as the Cabbage tree palm, and Illawarra flame tree will be incorporated into the landscape design in an attempt to rejuvenate local flora into the site.

A series of community gardens will be located close to the independent living units and the nursing home. This will be an opportunity to encourage community participation and contribute to patient well being. Produce from these gardens will also provide an income opportunity for participants. These gardens in themselves will also provide opportunities for recycling and composting.

The planting has been designed to provide maximum amenity in the form of controlled sun and shade whilst also minimising water use. Both larger and smaller plant species are selected for both appearance and drought resistance to reduce water requirements.

A number of additional water conservation measures will be put in place to decrease the use of water in the external environment. Garden beds are re-mulched on a regular basis and wetting agents are used to aid with water penetration and to minimize water loss. Water storage crystals are used in garden beds to utilize rain water and runoff therefore reducing the need for watering. Garden beds are weeded regularly to reduce competition with landscape plants for water. Lawns are regularly aerated to improve water absorption. Rubber stabilizers are used on high traffic lawns to reduce lawn re-establishment.

Building Materials and Construction methods

The project will employ a range of passive and active measures to achieve a high level of energy saving and greenhouse gas reduction.

The north - south orientation of the buildings is conducive to achieving an appropriate response to energy conservation. This preferred orientation will reduce the need for auxiliary heating and cooling, resulting in less energy consumption and reduced greenhouse emissions.

Page 47 of 47



The Green Star Healthcare Pilot will be utilised as an evaluation tool of the environmental performance for the hospital. The Green Star Multiunit Residential Pilot may be utilised for the independent living units and living accommodation areas.



The use of green and locally produced materials will be applied where possible, to achieve low energy consumption and low Co2 emissions, reducing



the developments carbon footprint during construction and use.

The use of the Green Building Council of Australia's Green Star rating across the site will provide independent certification of the environmental performance of the project.

Transport

The development proposal aims to promote green, healthy living. The new community will be encouraged to undertake sustainable modes of travel by walking and cycling. Non-car users will be given priority throughout the site, with a 2.5m share way surrounding the perimeter of the site to encourage pedestrian and cycle access to and from the site facilities.

Further encouragement to cyclers are the lock up bike racks in the basement car park levels as well as secured shower and change stalls located within each of the buildings.

Public transport with bus laybacks will be provided throughout the site, reducing traffic congestion and green house emissions, from private forms of transport.

A 2.5m share way is provided to the perimeter of the site. This share way will be used to encourage pedestrian and cycle access to and from the site

Page 48 of 48



facilities, with showers and changing amenities to promote a greener means of transport.

Bus laybacks with separate entrances will be provided throughout the site to encourage the use or public transport to and from the site, while reducing traffic congestion of surrounding roads and access points. This regular and reliable transport service will greatly benefit site uses and surrounding residents.

Air Quality

In terms of air quality, the concentrations of all pollutants would be below Australian Air Quality objectives in the locality of the site, thus no significant emissions are associated with the proposals.

There will be no incineration facilities and therefore no burning of waste on site, which will minimise air pollutants.

The site and will be accessible by a range of non-car modes, including by foot, bicycle and by bus reducing the need to travel and consequently minimising traffic related air pollutants.

Noise

Refer to Acoustic report

Roof top plant rooms will be provided with acoustic baffling to reduce noise levels at the property boundary to within accepted guidelines.

Page 49 of 49



Landscape Statement

Public Domain



Figure 6. Range of plant species

Vistas and views have been created through the landscaped garden areas that separate the individual buildings. These green spaces are highlighted by the escarpment views from the south and west of the site. The public domain introduces Native Flora throughout the landscaped areas to keep in tone with the natural environment, and frame views landmarks within and to beyond the site. The extensively landscaped gardens will link the different

building types whilst offering people a chance to appreciate the highly developed specific sensory experience offered by the individual gardens. The walkways will merge into the existing and proposed fabric of the urban context and allow for the existing community to become an integral part of the benefits of the development.

Paths will allow for site circulation and easy access from retail spaces to recreation space and from one building to the other. All paths throughout the site will be wheelchair accessible to allow for equality of physical abilities and prevent wheelchair accessible spaces being neglected and considered as an afterthought. There will be no stairs throughout the entire site. The materials of the paths will be durable, slip resistant and in specific spaces the use of materials, such as rubberized paving will be implemented to soften any falls.

Vegetation will consist of native, indigenous and exotic trees, which complement the existing nature of the area and create a habitat for native species. The vegetation will create enclosed spaces for private contemplation or mourning and open spaces for the local community, visitors and patients to play and enjoy more physical activity. By creating a variety of non-specific spaces, the community will be allowed to be Page 50 of 50



creative in their use of the site and thus form a strong connection and create a sense of ownership, which will aid in natural surveillance and maintenance.



Figure 7: Typical communal space

Vegetation has been specifically placed to allow for privacy for those inside and outside the buildings without jeopardising views or creating a fish bowl effect. For many, the view outside their hospital bed window is their only connection to the outside world for extended periods of time and thus the views out of the hospital are extraordinarily important for not only the mental but physical health of patients. It has been proven that patients with a pleasant scene outside their hospital room not only have fewer complications but also recover faster. Thus the views from above the site have been carefully considered to create a calm, interesting and sculptural outlook.

The Public Domain will be naturalistic with a variety of dry and wet creek beds. This is not only for visual amenity but also function as an environmentally sensitive drainage system that reduces the amount of water wasted through storm water drains. It allows for natural replenishment of ground water through the pooling and settling of water. Storm water runoff will also be captured in numerous ponds around the site and naturally filtered and reused.

The site will be a healing landscape through calm general use areas and specific smaller spaces for therapy, recreation and outreach programs.

Page 51 of 51



These specific areas include the dementia and psychotherapy gardens as discussed below.

Dementia Garden

The dementia garden located between the western arms of the nursing home creates a safe, therapeutic and calming space for all residents, especially targeting those who are suffering Alzheimer's disease. It is specifically designed to cater for these patients through the use of specific plants, paving, and form.

Fragrant plant species will be used in specific areas of the landscape to create reference points or landmarks. For example the south side of the building will be planted with Gardenias and ferns and incorporate a dry creek bed. The northern side of the garden will house palms, a magnolia tree and lavender. This will aid in patient orientation. These fragrant plants will stimulate memory, conversation and activity.

Running water will also be incorporated into the garden in the form of a shallow reflection pond at the junction of the two ponds. Trickling water is shown to have therapeutic benefits and this area will become an area for quiet contemplation. This will also aid in patient orientation.



Figure 8: Early site analysis

Paths are essential in creating

an accessible and safe dementia garden. Paths with an uninterrupted handrail will be a continuous level loop without dead ends, to limit frustration and confusion for the resident. The figure 8 loop is ideal as it allows choice for those who are more active to walk a further distance but limits confusion. Path material will consist of rubberized paving which is firm enough for wheelchairs and IV poles but also cushions falls. Rubberized paving also reduces glare that allows for improved vision.

This site also allows for a range of seating. It includes a protected entrance area that allows patients to adjust to the change in light and also sit and watch the activity if they are unable to participate. There is also seating with backrests and arms near the water feature to allow for Page 52 of 52



reflection. In addition there is a small area from staff meetings and outreach programs and craft classes to occur.

A garden bed located along the perimeter of the pathway will reduce confusion in direction while also providing enclosure and safety to the facility. The centre of the figure eight will be low mounds that allow for visual interest in the landscape but doesn't obstruct staff supervision of the area. This leaves residents and staff feeling safe and secure in the garden and thus leads to increased enjoyment.

Psychotherapy Garden

The Psychotherapy garden will be a safe and durable outdoor space for therapy and recreation. It will be an enclosed space to allow for the safety of patients and staff and accommodate spaces for group outreach programs and solitary contemplation. Planting will be kept minimal with sculptural Cyathea cooperii arranged to create private sanctuaries for residents but allow for full visibility for staff. It will also allow for shaded areas for patients with sensitivity to sunlight to enjoy the outdoor without risk.

The space will include different tactile surfaces for interest including, astroturf, rubberized paving, and paving. There will also be areas for craft and exploration of the individual patient's creative side. Studies have shown that gardening and harvesting are beneficial to young patients suffering from mental illnesses and thus there is an opportunity for staff to create a small planting area that will be tended to by the residents.

Community Garden

Community gardens will be established throughout the site. The aim of these gardens is to provide an opportunity for patients, staff and residents of the precinct to come together and share in a productive activity. The community gardens will also provide an opportunity to share with neighbouring community. Aside from the advantage of growing and harvesting from a social regard, these gardens will also assist in providing fresh fruit, vegetable and herbs to those involved.



EXTERNAL FINISHES SCHEDULE

PROJECT: ILLAWARRA INTERNATIONAL HEALTH PRECINCT

- AT: Huntley and Avondale Rd, Huntley
- FOR: La Vie Developments Pty Limited

Space	Item	Description	Supplier
name Buildings 1 – 4, Building 5c	Roof	Colorbond metal roof sheeting Colour: Surfmist	Colorbond – 1800 022 999
	Soffit lining	Bronze metallic Code 504	Alucobond (02) 8525 6900
	Downpipes	Copper	ARC Arch. Roof & Wall Cladding – 9482 4461 Cont: Greg Cunning: 0425 345 863
	Spandrel cladding	Corrugated copper	ARC Arch. Roof & Wall Cladding – 9482 4461 Cont: Greg Cunning: 0425 345 863
	East, south and western walls	Honed sandstone Colour: Nicabor Weave Finish: Half polished (Honed) Size: 600 x 600mm	Classic ceramics – Cont: Loren Clay Ph: 9560 6566
	Walls to Car park levels	Precast concrete with dark aggregate Colour: Charcoal	
	Glazing	Solarplus Low E Twin-Glaze	G. James Glass –
		Colour: Green	Cont: Jason (07) 3877 2872 (QLD)
	Window frames	Bronze anodised	
	Balustrades	Stainless steel and glass	
	Entry portals	Honed sandstone OR Dark Basalt	
	Paving to entry	Boral Stylestone: Colour: Charcoal Honed Size: 300 x 300	Boral Masonry Ltd Ph: 9840 2354
ļ	Driveway	Concrete	
	Surface car park	Concrete	
Buildings 5a and 5b			
Podium	Walls	Precast concrete with dark aggregate	

Page 54 of 54



		Colour: Charcoal	
	Balustrade	Stainless steel and glass	
	Paving to	Unit paving as shown on	
	Retail plaza	landscape plan	
	Paving to	Unit paving as shown on	
	Huntley	landscape plan	
	Road entry		
	to Hospital Window	Powdercoat: Ironstone	
	frames	r owderebat. Itonstone	
Tower	Roof	Colorbond metal sheeting	Colorbond – 1800 022 999
		Colour: Surfmist	
	Spandrel	Sunrise silver metallic Code 600	Alucobond (02) 8525 6900
	Glazing	Solarplus Low E Twin-Glaze	G. James Glass –
		Colour: Green	Cont: Jason (07) 3877 2872 (QLD)
	Window frames	Silver anodised	
Buildings 6. 7 and 8a	Roof	Colorbond metal roof sheeting Colour: Surfmist	Colorbond – 1800 022 999
	Soffit lining	Bronze metallic Code 504	Alucobond (02) 8525 6900
	Downpipes	Copper	ARC Arch. Roof & Wall Cladding – 9482 4461 Cont: Greg Cunning: 0425
	Spandrel cladding	Corrugated copper	345 863 ARC Arch. Roof & Wall Cladding – 9482 4461 Cont: Greg Cunning: 0425 345 863
	Walls	Honed sandstone Colour: Nicabor Weave Finish: Half polished (Honed) Size: 600 x 600mm	Classic ceramics – Cont: Loren Clay (02) 9560 6566
	Glazing	Solarplus Low E Twin-Glaze	G. James Glass –
		Colour: Green	Cont: Jason (07) 3877 2872 (QLD)
	Window frames	Bronze anodised	
	Balustrades	Stainless steel and glass	
	Paving to	Boral Stylestone:	Boral Masonry Ltd
	entry	Colour: Charcoal Honed	Ph: 9840 2354
ļ		Size: 300 x 300	
	Entry Portal	Honed sandstone OR Dark Basalt	
Buildings 8b	Roof	Colorbond roof sheeting Colour: Manor Red/Woodland Green/ Deep Ocean OR Jasper	Colorbond – 1800 022 999

Page 55 of 55



	own pipes nd gutters	To match roof	
W	Valls	ESCURA Smooth Face brick Taupe / Peral Grey/ Red OR Choc Tan	Boral Masonry Ltd Ph: 02 9840 2354
B	alustrades	Stainless steel and glass	
	Garage oors	To match roof	
	Vindow rames	Bronze anodised	
D	Driveway	Coloured concrete	